

IN THE CLAIMS:

The following is a complete listing of the claims, and replaces all earlier listings and all earlier versions.

1. - 33. (Canceled).

34. (Currently Amended) An image display apparatus, comprising:

a display panel for displaying an image by ~~irradiation with electrons from an electron source to~~ by irradiating a fluorescent substance with electrons from an electron source;

a scanning circuit for supplying a scanning signal to said display panel;

a modulation circuit for supplying a modulation signal to said display panel;

a pulse generating circuit for generating pulse signals at a predetermined time period; and

a control circuit for stopping output from said scanning circuit and/or said modulation circuit to said display panel until ~~a signal output from said scanning circuit and/or said modulation circuit to said display panel is determined~~ said pulse generating circuit generates a predetermined number of pulse signals in starting image display by outputting a signal from said scanning circuit and/or said modulation circuit to said display panel.

35. (Currently Amended) An image display apparatus, comprising:

a display panel for displaying an image ~~irradiation with electrons from an~~

~~electron source to~~ by irradiating a fluorescent substance with electrons from an electron source;

a scanning circuit for supplying a scanning signal to said display panel;

a modulation circuit for supplying a modulation signal to said display panel;

a pulse generating circuit for generating pulse signals at a predetermined time period; and

~~a control circuit for delaying output of a signal from said scanning circuit and/or said modulation circuit to said display panel after a power source is turned on in starting image display by outputting a signal from said scanning circuit and/or said modulation circuit to said display panel, wherein the signal output from said scanning circuit and/or said modulation circuit to said display panel is determined during the delay time for controlling said scanning circuit and/or said modulation circuit so as to output the scanning signal and/or the modulation signal after said pulse generating circuit generates a predetermined number of pulse signals after a power source is turned on.~~

36. (Currently Amended) An image display apparatus, comprising:

~~a display panel for displaying an image irradiation with electrons from an electron source to~~ by irradiating a fluorescent substance with electrons from an electron source;

an acceleration potential supply circuit for supplying to said display panel an acceleration potential for accelerating electrons from the electron source;

a scanning circuit for supplying a scanning signal to said display panel;

a modulation circuit for supplying a modulation signal to said display panel;

and

a control circuit for stopping supply of the acceleration potential until a signal output from said scanning circuit and/or said modulation circuit to said display panel is determined in starting image display by outputting a signal from said scanning circuit and/or said modulation circuit to said display panel.

37. (Currently Amended) An image display apparatus, comprising:

a display panel for displaying an image ~~irradiation with electrons from an electron source to~~ by irradiating a fluorescent substance with electrons from an electron source;

an acceleration potential supply circuit for supplying to said display panel an acceleration potential for accelerating electrons from the electron source;

a scanning circuit for supplying a scanning signal to said display panel;

a modulation circuit for supplying a modulation signal to said display panel;

and

a control circuit for delaying supply of the acceleration potential after a power source is turned on in starting image display by outputting a signal from said scanning circuit and/or said modulation circuit to said display panel,

wherein the signal output from said scanning circuit and/or said modulation circuit to said display panel is determined during the delay time.

38. (Currently Amended) An image display apparatus, comprising:

a display panel for displaying an image ~~irradiation with electrons from an~~

~~electron source to~~ by irradiating a fluorescent substance with electrons from an electron source;

a scanning circuit for supplying a scanning signal to said display panel;

a modulation circuit for supplying a modulation signal to said display panel;

and

a control circuit for stopping output from said scanning circuit and/or said modulation circuit to said display panel until a power source voltage of said scanning circuit and/or said modulation circuit reaches a desired value in starting image display by outputting a signal from said scanning circuit and/or said modulation circuit to said display panel.

39. (Currently Amended) An image display apparatus, comprising:

a display panel for displaying an image ~~irradiation with electrons from an electron source to~~ by irradiating a fluorescent substance with electrons from an electron source;

a scanning circuit for supplying a scanning signal to said display panel;

a modulation circuit for supplying a modulation signal to said display panel;

and

a control circuit for delaying output of a signal from said scanning circuit and/or said modulation circuit to said display panel after a power source is turned on in starting image display by outputting a signal from said scanning circuit and/or said modulation circuit to said display panel,

wherein a power source voltage of said scanning circuit and/or said modulation circuit reaches a desired value during the delay time,

40. (Currently Amended) An image display apparatus, comprising:
a display panel for displaying an image ~~irradiation with electrons from an electron source to~~ by irradiating a fluorescent substance with electrons from an electron source;

an acceleration potential supply circuit for supplying to said display panel an acceleration potential for accelerating electrons from the electron source;

a scanning circuit for supplying a scanning signal to said display panel;

a modulation circuit for supplying a modulation signal to said display panel;




and

a control circuit for stopping supply of the acceleration potential until a power source voltage of said scanning circuit and/or said modulation circuit reaches a desired value in starting image display by outputting a signal from said scanning circuit and/or said modulation circuit to said display panel.

41. (Currently Amended) An image display apparatus, comprising:
a display panel for displaying an image ~~irradiation with electrons from an electron source to~~ by irradiating a fluorescent substance with electrons from an electron source;

an acceleration potential supply circuit for supplying to said display panel an acceleration potential for accelerating electrons from the electron source;

a scanning circuit for supplying a scanning signal to said display panel;
a modulation circuit for supplying a modulation signal to said display panel;
and
a control circuit for delaying supply of the acceleration potential after a power source is turned on in starting image display by outputting a signal from said scanning circuit and/or said modulation circuit to said display panel,
wherein a power source voltage of said scanning circuit and/or said modulation circuit reaches a desired value during the delay time.



42. (Currently Amended) An image display apparatus, comprising:
a display panel for displaying an image irradiation ~~with electrons from an electron source to~~ by irradiating a fluorescent substance with electrons from an electron source;

an acceleration potential supply circuit for supplying to said display panel an acceleration potential for accelerating electrons from the electron source;
a scanning circuit for supplying a scanning signal to said display panel;
a modulation circuit for supplying a modulation signal to said display panel;
and
a control circuit for stopping output of a signal from said scanning circuit and/or said modulation circuit to said display panel, and then stopping supply of power to said scanning circuit and/or said modulation circuit in turning off a power source while an image is displayed by outputting a signal from said scanning circuit and/or said modulation circuit to said display panel.


43. (Currently Amended) An image display apparatus, comprising:
a display panel for displaying an image ~~irradiation with electrons from an~~
~~electron source to~~ by irradiating a fluorescent substance with electrons from an electron
source;

an acceleration potential supply circuit for supplying to said display panel an
acceleration potential for accelerating electrons from the electron source;

a scanning circuit for supplying a scanning signal to said display panel;

a modulation circuit for supplying a modulation signal to said display panel;

and



a control circuit for stopping output of a signal from said scanning circuit
and/or said modulation circuit to said display panel, and then stopping supply of power to
said scanning circuit and/or said modulation circuit in performing emergency shutdown
while an image is displayed by outputting a signal from said scanning circuit and/or said
modulation circuit to said display panel.

44. (Currently Amended) An image display apparatus, comprising:
a display panel for displaying an image ~~irradiation with electrons from an~~
~~electron source to~~ by irradiating a fluorescent substance with electrons from an electron
source;

an acceleration potential supply circuit for supplying to said display panel an
acceleration potential for accelerating electrons from the electron source;


a scanning circuit for supplying a scanning signal to said display panel;

a modulation circuit for supplying a modulation signal to said display panel;

and

a control circuit for stopping output of a signal from said scanning circuit and/or said modulation circuit to said display panel, and then stopping supply of power to said scanning circuit and/or said modulation circuit when a voltage abnormality is observed while an image is displayed by outputting a signal from said scanning circuit and/or said modulation circuit to said display panel.

45. (Currently Amended) An image display apparatus, comprising:

 a display panel for displaying an image ~~irradiation with electrons from an electron source to~~ by irradiating a fluorescent substance with electrons from an electron source;

an acceleration potential supply circuit for supplying to said display panel an acceleration potential for accelerating electrons from the electron source;

a scanning circuit for supplying a scanning signal to said display panel;

a modulation circuit for supplying a modulation signal to said display panel;

a first power source for supplying power to said acceleration potential supply circuit and/or said scanning circuit and/or said modulation circuit; and

a second power source for supplying power to said scanning circuit and/or said modulation circuit upon an abnormal state; and

a control circuit for stopping output from said acceleration potential supply circuit said scanning circuit and/or said modulation circuit using the power from said second power source.

46. (Original) The image forming apparatus according to claim 45, wherein the abnormal state is emergency shutdown.

47. (Currently Amended) The image forming apparatus according to claim ~~[[34]]~~ 45, wherein said second power source comprises a capacitor or a battery.

48. (Previously Presented) The image display apparatus according to claim 34, wherein the electron source comprises a plurality of row-direction wiring lines for receiving a scanning signal, a plurality of column-direction wiring lines for receiving a modulation signal, and a plurality of electron-emitting devices connected to the row-direction wiring lines and the column-direction wiring lines.

49. (Previously Presented) The image display apparatus according to claim 34, wherein the acceleration potential for accelerating electrons from the electron source is a potential higher by not less than 500 V than a potential applied to emit electrons in the electron source.

50. (Previously Presented) The image display apparatus according to claim 34, wherein the acceleration potential for accelerating electrons from the electron source is a potential higher by not less than 3,000 V than a potential applied to emit electrons in the electron source.

51. (Previously Presented) The image display apparatus according to claim 34, wherein the acceleration potential for accelerating electrons from the electron source is a potential higher by not less than 5,000 V than a potential applied to emit electrons in the electron source.

52. (New) An image display apparatus, comprising:

- a display panel for displaying an image by irradiating a fluorescent substance with electrons from an electron source;
- an acceleration potential supply circuit for supplying to said display panel an acceleration potential for accelerating electrons from the electron source;
- a scanning circuit for supplying a scanning signal to said display panel;
- a modulation circuit for supplying a modulation signal to said display panel;
- a pulse generating circuit for generating pulse signals at predetermined time period; and
- a control circuit for stopping supply of the acceleration potential until said pulse generating circuit outputs a predetermined number of pulse signals in starting image display by outputting a signal from said scanning circuit and/or said modulation circuit to said display panel.

53. (New) An image display apparatus, comprising:

- a display panel for displaying an image by irradiating a fluorescent substance with electrons from an electron source;

an acceleration potential supply circuit for supplying to said display panel an acceleration potential for accelerating electrons from the electron source;

a scanning circuit for supplying a scanning signal to said display panel;

a modulation circuit for supplying a modulation signal to said display panel;

a pulse generating circuit for generating pulse signals at predetermined time period; and

a control circuit for controlling said acceleration potential supply circuit so as to supply the acceleration potential after said pulse generating circuit outputs a predetermined number of pulse signals after a power source is turned on.
